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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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In re Application of:

Saulpaugh, et al.

Serial No. 09/653,215

Filed: August 31, 2000

For: METHOD AND APPARATUS

TO OBTAIN SERVICE

CAPABILITY CREDENTIALS

Group Art Unit: 2131

Examiner: Chen, Shin Hon

Atty. Dkt. No.: 5181-70400

P5200

CERTIFICATE OF MAILING 37 C.F.R. § 1.8

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Robert C. Kowert
Name of Registered Representative

September 11, 2006

Date Sign

APPEAL BRIEF

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir/Madam:

Further to the Notice of Appeal filed July 10, 2006, Appellants present this Appeal Brief. Per M.P.E.P. § 1207.04, no fee should be due since this is a reinstatement of the previous appeal of this application for which the appeal brief fee has already been paid. Appellants respectfully request that the Board of Patent Appeals and Interferences consider this appeal.

I. REAL PARTY IN INTEREST

As evidenced by the assignment recorded at Reel/Frame 011070/0129, the subject application is owned by Sun Microsystems, Inc., a corporation organized and existing under and by virtue of the laws of the State of Delaware, and now having its principal place of business at 4150 Network Circle, Santa Clara, CA 95054.

II. RELATED APPEALS AND INTERFERENCES

No other appeals, interferences or judicial proceedings are known which would be related to, directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

Claims 1-7, 9-23, 25 - 39, and 41 - 47 stand finally rejected. Claims 8 are objected to as being dependent on rejected base claims but allowable if rewritten in independent form. The rejection of claims 1-7, 9-23, 25 - 39, and 41 - 47 is being appealed. A copy of claims 1-7, 9-23, 25 - 39, and 41 - 47 as currently pending is included in the Claims Appendix herein below.

IV. STATUS OF AMENDMENTS

No amendments to the claims have been submitted subsequent to the final rejection.

V. <u>SUMMARY OF CLAIMED SUBJECT MATTER</u>

Independent claim 1 is directed toward a method for accessing a service in a distributed computing environment in which a client locates a service within the distributed computing environment and requests a capability credential to allow the client access to a portion of the service's capabilities. The service provides a plurality of capabilities to clients executing in the distributed computing environment. In distributed computing environments according to some embodiments, service discovery protocols allow client to search for and locate services of varies types. For example, clients may send search messages or queries using data representation languages, such as XML, which may include search criteria, such as desired service name and/or service type. See, e.g., FIGs. 4, 6-9, 12, page 25, line 27 - page 26, line 13; page 27, lines 22 - 30; page 28, line 13 - page 29, line 16; page 29, line 26 - page 30. Service providers may respond to search queries by providing service advertisements or by providing information to allow client to access stored advertisements, such as via a URI or other address. A service provider may compare the client's search criteria against service advertisements to find advertisements that match the search criteria. Additionally, clients may search The advertisements may use data advertisements in spaces or space services. representation languages and may include information, such as an address or interface, allowing client to obtain credentials necessary for access the service. A service advertisement may either be a complete advertisement including schema information regarding messages usable to access the service, or a protected (or secure) advertisement not including such schema information. See, e.g., FIGs. 4, 6-9, 12, 14-16, 18, 20, 22, 24, 26a-b, 28, 29 and 41-43; page 25, line 27 – page 26, line 13; page 27, lines 22 – 30; page 28, line 13 - page 29, line 16; page 29, line 26 - page 30, line 23; page 54, line 3 - 55, line 20; page 64, line 18 – page 65, line 20; page 90, line 27 – page 91, line 12; page 92, lines 16 – 29; page 106, lines 12-30; page 107, lines 3 – 28; page 108, lines 11-26; page 111, line 16 – page 112, line 6; page 114, lines 13-23.

A client may select a service and request a capability credential by sending (e.g., to a URI specified in a corresponding service advertisement) a capability credential

request message. The advertisement may include the address of an appropriate authentication service providing capability credentials. In some embodiments, the advertisement may include a schema or other information regarding messages to access the service. For instance, a service's message set may be defined using a data representation language schema, such as an XML schema, that defines each message format using typed tags. As part of requesting a capability credential, the client may indicate a set of desired capabilities. For example, a client may present the service a set of desired capabilities in the form of a secure advertisement. *See, e.g.*, FIGs. 4, 6- 9, 12, 14-16, 18, 20, 22, 24, 26a-b, 28, 29 and 41-43; page 29, line 26 – page 30, line 23; page 55, lines 8-20; page 93, lines 1 – 24; page 102, lines 6 – 25; page 103, line 24 – page 104, line 17; page 107, lines 12-30.

Additionally, the client receives a capability credential indicating that the client has the right to use only the portion of the service's capabilities where the portion of the service's capabilities is less than a total of the capabilities provided by the first service. See, e.g., FIGs. 20, 22, 26a-b and 41-43; page 13, lines 21 – 30; page 14, lines 18 – 27. As noted above, a client requests a capability credential using a capability credential request message. A credential request message may be sent to an authentication service using a URI specified in a service's advertisement. The capability credential may be generated according to capabilities requested by the client and/or the client's level of authorization. Additionally, if the client received a protected service advertisement in response to its original search query, the client may also use the capability credential to obtain a complete advertisement. See, e.g., FIGs. 20, 22, 26a-b and 41-43; page 13, lines 21 – 30; page 14, line 29 – page 15, line 13; page 38, lines 17-29; page 59, lines 16-25; page 60, lines 7-14; page 66, lines 16 – 26; page 75, lines 23 – 26; page 91, lines 1-12; page 104, line 21 – page 106, line 7.

The client uses the capability credential to access portions of the service's capabilities. For instance, the client may use both the capability credential and the service advertisement to create a message gate for sending messages according to a schema in the service advertisement to access and use the service. In some embodiments,

the gate may include the capability credential in each message to that the service can authenticate each message from the client. *See, e.g.*, FIGs. 20, 22, 26a-b and 41-43; page 30, line 27 – page 31, line 38, line 5; page 36, lines 5-12; page 45, lines 1 – 14; page 54, lines 13 – 21; page 75, lines 9-17; page 91, line 14 – page 92, line 7; page 98, line 23 – page 99, line 14.

Independent claim 17 is directed toward a client device that includes a connection to a distributed computing environment and an interface coupled to the connection that is configured to locate a service within the distributed computing environment. The first service provides a plurality of capabilities to clients executing in the distributed computing environment. In distributed computing environments according to some embodiments, service discovery protocols allow client to search for and locate services of varies types. For example, clients may send search messages or queries using data representation languages, such as XML, which may include search criteria, such as desired service name and/or service type. See, e.g., FIGs. 4, 6-9, 12, page 25, line 27 page 26, line 13; page 27, lines 22 – 30; page 28, line 13 – page 29, line 16; page 29, line 26 - page 30. Service providers may respond to search queries by providing service advertisements or by providing information to allow client to access stored advertisements, such as via a URI or other address. A service provider may compare the client's search criteria against service advertisements to find advertisements that match the search criteria. Additionally, clients may search advertisements in spaces or space services. The advertisements may use data representation languages and may include information, such as an address or interface, allowing client to obtain credentials necessary for access the service. A service advertisement may either be a complete advertisement including schema information regarding messages usable to access the service, or a protected (or secure) advertisement not including such schema information. See, e.g., FIGs. 4, 6-9, 12, 14-16, 18, 20, 22, 24, 26a-b, 28, 29 and 41-43; page 25, line 27 - page 26, line 13; page 27, lines 22 - 30; page 28, line 13 - page 29, line 16; page 29, line 26 - page 30, line 23; page 54, line 3 - 55, line 20; page 64, line 18 - page 65, line 20; page 90, line 27 - page 91, line 12; page 92, lines 16 - 29; page 106, lines 12-30; page 107, lines 3 - 28; page 108, lines 11-26; page 111, line 16 - page 112, line 6; page

114, lines 13-23.

The interface of the client device of claim 17 is configured to request a capability credential over the connection for a set of desired capabilities to allow a client on the client device access to a portion of the service's capabilities. A client may select a service and request a capability credential by sending (e.g., to a URI specified in a corresponding service advertisement) a capability credential request message. The advertisement may include the address of an appropriate authentication service providing capability credentials. In some embodiments, the advertisement may include a schema or other information regarding messages to access the service. For instance, a service's message set may be defined using a data representation language schema, such as an XML schema, that defines each message format using typed tags. As part of requesting a capability credential, the client may indicate a set of desired capabilities. For example, a client may present the service a set of desired capabilities in the form of a secure advertisement. See, e.g., FIGs. 4, 6-9, 12, 14-16, 18, 20, 22, 24, 26a-b, 28, 29 and 41-43; page 29, line 26 – page 30, line 23; page 55, lines 8-20; page 93, lines 1 – 24; page 102, lines 6 – 25; page 103, line 24 – page 104, line 17; page 107, lines 12-30.

The client device interface is also configured to receive the capability credential over the connection. As with the capability credential described above regarding claim 1, the capability credential of claim 17 indicates that the client has the right to use only the portion of the service's capabilities, where the portion of the first services capabilities is less than the total of the capabilities provided by the first service. *See, e.g.*, FIGs. 20, 22, 26a-b and 41-43; page 13, lines 21 – 30; page 14, lines 18 – 27. As noted above, a client requests a capability credential using a capability credential request message. A credential request message may be sent to an authentication service using a URI specified in a service's advertisement. The capability credential may be generated according to capabilities requested by the client and/or the client's level of authorization. Additionally, if the client received a protected service advertisement in response to its original search query, the client may also use the capability credential to obtain a complete advertisement. *See, e.g.*, FIGs. 20, 22, 26a-b and 41-43; page 13, lines 21 – 30;

page 14, line 29 – page 15, line 13; page 38, lines 17-29; page 59, lines 16-25; page 60, lines 7-14; page 66, lines 16 – 26; page 75, lines 23 – 26; page 91, lines 1-12; page 104, line 21 – page 106, line 7.

The interface is further configured to use the capability credential to access the portion of the service's capabilities. For instance, the client may use both the capability credential and the service advertisement to create a message gate for sending messages according to a schema in the service advertisement to access and use the service. In some embodiments, the gate may include the capability credential in each message to that the service can authenticate each message from the client. *See, e.g.*, FIGs. 20, 22, 26a-b and 41-43; page 30, line 27 – page 31, line 38, line 5; page 36, lines 5-12; page 45, lines 1 – 14; page 54, lines 13 – 21; page 75, lines 9-17; page 91, line 14 – page 92, line 7; page 98, line 23 – page 99, line 14.

Independent claim 33 is directed toward a tangible, computer accessible storage medium including program instructions that are computer-executable on a client device to implement the method described above regarding claim 1. A client locates a service within the distributed computing environment and requests a capability credential to allow the client access to a portion of the service's capabilities. The service provides a plurality of capabilities to clients executing in the distributed computing environment. In distributed computing environments according to some embodiments, service discovery protocols allow client to search for and locate services of varies types. For example, clients may send search messages or queries using data representation languages, such as XML, which may include search criteria, such as desired service name and/or service type. See, e.g., FIGs. 4, 6-9, 12, page 25, line 27 - page 26, line 13; page 27, lines 22 -30; page 28, line 13 - page 29, line 16; page 29, line 26 - page 30. Service providers may respond to search queries by providing service advertisements or by providing information to allow client to access stored advertisements, such as via a URI or other address. A service provider may compare the client's search criteria against service advertisements to find advertisements that match the search criteria. Additionally, clients may search advertisements in spaces or space services. The advertisements may use data representation languages and may include information, such as an address or interface, allowing client to obtain credentials necessary for access the service. A service advertisement may either be a complete advertisement including schema information regarding messages usable to access the service, or a protected (or secure) advertisement not including such schema information. *See, e.g.*, FIGs. 4, 6- 9, 12, 14-16, 18, 20, 22, 24, 26a-b, 28, 29 and 41-43; page 25, line 27 – page 26, line 13; page 27, lines 22 – 30; page 28, line 13 – page 29, line 16; page 29, line 26 – page 30, line 23; page 54, line 3 – 55, line 20; page 64, line 18 – page 65, line 20; page 90, line 27 – page 91, line 12; page 92, lines 16 – 29; page 106, lines 12-30; page 107, lines 3 – 28; page 108, lines 11-26; page 111, line 16 – page 112, line 6; page 114, lines 13-23.

A client may select a service and request a capability credential by sending (e.g., to a URI specified in a corresponding service advertisement) a capability credential request message. The advertisement may include the address of an appropriate authentication service providing capability credentials. In some embodiments, the advertisement may include a schema or other information regarding messages to access the service. For instance, a service's message set may be defined using a data representation language schema, such as an XML schema, that defines each message format using typed tags. As part of requesting a capability credential, the client may indicate a set of desired capabilities. For example, a client may present the service a set of desired capabilities in the form of a secure advertisement. *See, e.g.*, FIGs. 4, 6-9, 12, 14-16, 18, 20, 22, 24, 26a-b, 28, 29 and 41-43; page 29, line 26 – page 30, line 23; page 55, lines 8-20; page 93, lines 1 – 24; page 102, lines 6 – 25; page 103, line 24 – page 104, line 17; page 107, lines 12-30.

Additionally, the client receives a capability credential indicating that the client has the right to use only the portion of the service's capabilities where the portion of the service's capabilities is less than a total of the capabilities provided by the first service. See, e.g., FIGs. 20, 22, 26a-b and 41-43; page 13, lines 21 - 30; page 14, lines 18 - 27. As noted above, a client requests a capability credential using a capability credential request message. A credential request message may be sent to an authentication service

using a URI specified in a service's advertisement. The capability credential may be generated according to capabilities requested by the client and/or the client's level of authorization. Additionally, if the client received a protected service advertisement in response to its original search query, the client may also use the capability credential to obtain a complete advertisement. *See, e.g.*, FIGs. 20, 22, 26a-b and 41-43; page 13, lines 21 – 30; page 14, line 29 – page 15, line 13; page 38, lines 17-29; page 59, lines 16-25; page 60, lines 7-14; page 66, lines 16 – 26; page 75, lines 23 – 26; page 91, lines 1-12; page 104, line 21 – page 106, line 7.

The client uses the capability credential to access portions of the service's capabilities. For instance, the client may use both the capability credential and the service advertisement to create a message gate for sending messages according to a schema in the service advertisement to access and use the service. In some embodiments, the gate may include the capability credential in each message to that the service can authenticate each message from the client. *See*, *e.g.*, FIGs. 20, 22, 26a-b and 41-43; page 30, line 27 – page 31, line 38, line 5; page 36, lines 5-12; page 45, lines 1 – 14; page 54, lines 13 – 21; page 75, lines 9-17; page 91, line 14 – page 92, line 7; page 98, line 23 – page 99, line 14.

The summary above describes various examples and embodiments of the claimed subject matter; however, the claims are not necessarily limited to any of these examples and embodiments. The claims should be interpreted based on the wording of the respective claims.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- 1. Claims 1, 2, 5, 6 and 9-16 stand finally rejected under 35 U.S.C. § 102(a) as being anticipated by Adams (U.S. Patent 6,718,470).
- 2. Claims 3 and 7 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Adams.
- 3. Claim 4 stands finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Adams in view of Czerwinski et al. "An architecture for a Secure Service Discovery Service" (Hereinafter, Czerwinski).
- 4. Claims 17-23, 25-39 and 41-47 stand finally rejected under 35 U.S.C. § 102(a) as being anticipated by Adams.
- 5. Claims 17-23, 25-39 and 41-47 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Adams in view of Czerwinski.

VII. ARGUMENT

First Ground of Rejection

Claims 1, 2, 5, 6 and 9-16 stand finally rejected under 35 U.S.C. § 102(a) as being anticipated by Adams (U.S. Patent 6,718,470). Appellants traverse this rejection for at least the following reasons. Different groups of claims are addressed under their respective subheadings.

Claims 1, 2 and 16:

Regarding claim 1, Adams fails to disclose a client receiving a capability credential that indicates that the client has the right to use only a portion of a service's capabilities, wherein the portion is less that a total of the capabilities provided by the first service. Adams teaches a system for granting security privileges by providing test criteria data so that security privilege certificates (or other authorization credentials) may be selected from among multiple subscriber privilege data. Adams teaches that certificates, such as Kerberos tickets, privilege attribute certificates, or other public key certificates (Adams, column 7, lines 48-55) may be selected from among multiple privilege data based on test criteria supplied by a relying unit (such as a software application, computer node or other entity). A selector entity may search a common repository of security privilege certificates. The selector entity then returns any and all privilege data that meets the test criteria data. Thus, the selector unit may return multiple certificates, each of each meets the test criteria data. See, Adams, column 3, lines 26-59; column 4, lines 25-36; and column 5, lines 18-46. Adams does not mention anything about a selecting and returning a certificate that indicates a subscriber unit (client) has the right to use only an indicated portion of a services capabilities, which would be required for Adams to anticipate claim 1. Instead, Adams states that any matching attribute certificates are sent as privilege data (Adams, column 6, lines 65-67). The certificates in Adams do not indicate that a client has the right to use only a portion that is less than all of a service's provided capabilities. No mention is made in Adams of allowing access to only a portion of a service's capabilities.

The Examiner cites column 5, lines 14-32 of Adams and refers to Adams' teachings regarding a subscriber communicating a request for another application controlled by a relying party and regarding a certificate selector analyzing a subscriber's attribute certificates to determine whether any of them contain privilege data that is consistent with privilege test criteria. However, the teachings of Adams relied on by the Examiner do not disclose a client receiving a capability credential that indicates that the client has the right to use only a portion of a service's capabilities, wherein the portion is less that a total of the capabilities provided by the first service. Instead, the Examiner's cited passage describes a particular manner in which Adams' system determines whether the subscriber certificates, such as data representing a subscriber unit's privilege status, meet the particular required privilege test criteria data. Adams teaches that privilege test criteria data indicates "the specific privilege information necessary for the relying party to grant privilege to a subscriber unit" (Adams, column 3, lines 47-51). Thus, the portions of Adams relied on by the Examiner are not referring to a capability credential indicating that a client has the right to use only a portion of a services capabilities. Instead, the cited portions of Adams are teaching a particular method of determining whether a subscriber's privilege status meets the particular privilege requirements of a relying unit. As noted above, the certificates in Adams do not indicate that a client has the right to use only a portion of a service's capabilities. In fact, Adams makes no mention regarding allowing access to only a portion of a service's capabilities.

In the Advisory Action, the Examiner argues, "the privilege data returned by the selector entity indicates that the user has the right to use only certain portion of the service's capabilities." However, the Examiner's interpretation of Adams is incorrect. As described above, Adams' system determines whether subscriber certificates meet particular test criteria data. In other words, Adams' teaches that a subscriber's certificates are verified to ensure that the particular type of certificate is an approved type. For example, Adams teaches that the privilege test criteria data may indicate the specific privilege information necessary for the relying part to grant privilege

to the subscriber unit. The Examiner is merely speculating in hindsight regarding Adams' system. As noted above, nowhere does Adams make any mention whatsoever of a client receiving a capability credential that indicates that the client has the right to use only a portion of a service's capabilities, wherein the portion is less that a total of the capabilities provided by the first service.

Moreover, Adams is not concerned with granting a client rights to use only a portion of a service's capabilities. Instead, Adams is concerned with minimizing the number of certificates that must be transferred and also with preventing privilege data from being sent to non-privilege parties (Adams, column 2, lines 58-61 and column 3, lines 41-44). Adams contrasts his systems with previous systems that require the subscriber to present all attribute certificates to the relying party.

Anticipation requires the presence in a single prior art reference disclosure of <u>each</u> and every limitation of the claimed invention, <u>arranged as in the claim</u>. M.P.E.P 2131; Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 USPQ 481, 485 (Fed. Cir. 1984). The <u>identical</u> invention must be shown in as complete detail as is contained in the claims. Richardson v. Suzuki Motor Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). As discussed above, Adams clearly fails to disclose a client receiving a capability credential that indicates that the client has the right to use only a portion of a service's capabilities, wherein the portion is less that a total of the capabilities provided by the first service. Therefore, Adams cannot be said to anticipate claim 1.

Claim 5:

In regards to claim 5, Adams fails to disclose the client <u>receiving an</u> <u>advertisement for the first service</u>, wherein the advertisement <u>describes the portion of the first service's capabilities</u>. The Examiner admits that Adams makes "no specific mention of the advertisement" but asserts, "advertisement serves as a way of letting the user be aware of the service[s] available." The Examiner has clearly failed to provide a proper rejection of claim 5. By admitting that Adams does not disclose the use of an

advertisement, the Examiner has clearly admitted that Adams fails to <u>anticipate</u> claim 5. The Examiner's statement regarding how advertisements may serve as a way of letting a user know what services are available has absolutely no bearing on the fact that Adams fails to disclose anything about an advertisement for a service that *describes a portion of the service's capabilities*. The fact that Adam's system might benefit from the use of such an advertisement, as suggested by the Examiner, is irrelevant to a rejection based on anticipation (i.e. § 102). The Examiner's statement is also unsupported by any evidence of record.

A claim is "anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference" (M.P.E.P. § 2131). As admitted by the Examiner, Adams fails to disclose the use of an advertisement that describes a portion of the service's capabilities. Moreover, the Examiner has not shown that the use of advertisements is inherent in Adams' system. "To serve as an anticipation when the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence" and "[s]uch evidence must make clear that the missing descriptive matter is *necessarily present* in the thing described in the reference" (emphasis added, M.P.E.P. § 2131.01 III). As noted above and admitted by the Examiner, Adams makes no mention of advertisements, nor has the Examiner provided any evidence showing that advertisements are *necessarily present* in Adams' system. Instead, the Examiner has merely concluded that the use of an advertisement might be beneficial, which as stated above, is completely speculative and irrelevant. The Examiner is merely using hindsight speculation, which is clearly improper.

In the Response to Arguments section of the Final Action and in the Advisory Action, the Examiner asserts that a subscriber request to access an application through Adams' relying party's website "indicates that the advertisement for certain services exist as to enable a subscriber to request privilege to use such service", citing column 5, lines 14 - 18 of Adams. The Examiner further asserts, "Adams inherently disclose[s] these limitation[s] as they are [an] essential requirement for a subscriber to request certain

services provided by a relying party." Thus, the Examiner's argument is that the mere fact that a subscriber unit makes requests the use of a service inherently discloses the specific limitations of claim 5. The Examiner is incorrect. Even if Adams could be said to inherently disclose an advertisement, which Appellants maintain he does not, the Examiner has still failed to show how Adams' system inherently includes a client receiving an advertisement that describes the portion of the service's capabilities.

The Examiner's cited portion of Adams (column 5, lines 14 –18) merely states that a subscriber unit may communicate a request over a global network link to a website of a relying party request access to another application controlled by the relying party to facilitate a financial transfer. The cited passage does not contain any teaching that may be considered to inherently include a client receiving an advertisement for a service that describes a portion of the service's capabilities. In fact, Adams does not describe anything about a client receiving any sort of information that describes a portion of a service's capabilities. Nor has the Examiner provided any explanation or interpretation of Adams that includes the subscriber unit, which the Examiner equates to the client of Applicants' claim, receiving any such information. Instead, the Examiner merely asserts that Adams' teachings inherently disclose the specific limitations of Applicant's claims.

As noted above, the Examiner has not provided any extrinsic evidence that Adams' system necessarily includes a client receiving an advertisement for a service that describes a portion of the service's capabilities. Moreover, M.P.E.P. 2112 IV states, "[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic" (underlining in original). The Examiner's opinion that Adams' system inherently includes the use of advertisements "as a way of letting the user be away of the service available" or "to enable a subscriber to request privilege to use such service" are **not extrinsic evidence** that makes clear that the use of advertisements as recite in Applicants' claim 5 is necessarily present in Adams' system.

In further regard to claim 5, Adams fails to disclose that a client's indication of the set of desired capabilities comprises an indication of the advertisement. As noted above, Adams fails to mention anything about advertisements, as admitted by the Examiner. Furthermore, Adams does not mention anything about a client indicating a set of desired capabilities as part of requesting a capability credential, where the indication of the set of desired capabilities includes an indication of an advertisement for a service. As noted above, the Examiner has merely stated that the use of advertisements would be beneficial to Adams' system without showing that Adams' system actually includes the use of advertisements. The Examiner has not provided any argument, explanation, or evidence showing that Adams' system includes a client indicating a set of desired capabilities, where that indication includes an indication of an advertisement for a service providing those capabilities.

The Examiner cites column 6, lines 31-67 of Adams and states, "the subscriber wants to access the relying party's service, but has to request [a] credential from the centralized privilege data selector by submitting the subscriber's identity and the relying party's identifier." The cited passage only mentions that a subscriber includes an identification of the relying party, but makes no mention of any indication of an advertisement that describes a portion of the first service's capabilities. Furthermore, the cited passage only teaches that Adams' subscriber unit includes the relying party's identifier when requesting a security certificate. The cited passage makes no mention of the client including an indication of an advertisement for a service as part of an indication of a set of desired capabilities, as required by Applicants' claim 5. Nor does the Examiner mention anything about Adams' subscriber including an indication of an advertisement for the service when indicating a set of desired capabilities.

Thus, for at least the reasons above, the rejection of claim 5 is not supported by the cited art and removal thereof is respectfully requested.

Claim 6:

Regarding claim 6, contrary to the Examiner's assertion, Adams fails to disclose where the indication of the advertisement is the advertisement itself. The Examiner cites column 5, lines 14-18. However, the cited portion of Adams makes no mention of any indication of an advertisement, nor that such an indication of an advertisement is the advertisement itself. Instead, the cited passage states that a subscriber unit may communicate a request over a global network link to a website of a relying party requesting access to another application controlled by the relying party to facilitate a financial transfer. The cited passage provides no support for the Examiner's rejection of claim 6. Furthermore, in the rejection of claim 5, the Examiner admits that Adams makes no mention of advertisements.

In the Response to Arguments and the Advisory Action, the Examiner asserts that the use of advertisements is inherent in Adams' system. The Examiner is incorrect. Please refer to the remarks above regarding claim 5 for a detailed discussion regarding the fact that Adams' system does not inherently disclose the limitations of Applicants' claims. Furthermore, the Examiner have failed to provide nay extrinsic evidence, citation, explanation or interpretation illustrating that a subscriber unit's request necessarily indicates a set of desired capabilities that includes an indication of an advertisement (as recited in claim 5) where the indication of the advertisement is the advertisement itself, as recited in claim 6. Following the Examiner's line of reasoning (that the use of advertisements are inherent in Adams' system) a subscriber's request would also have to inherently include an advertisement. There is nothing about Adams' system that inherently requires a subscriber unit to include an advertisement (of which Adams makes no mention) in an indication of capabilities as part of requesting a capability credential. The Examiner's interpretation is clearly incorrect.

The Examiner has clearly failed to make a proper rejection of claim 6. The rejection of claim 6 is not supported by the cited art and removal thereof is respectfully requested.

Claim 9:

Regarding claim 9, Adams does not disclose an advertisement that is a protected advertisement that describes the first service's capabilities but does not provide an interface to the first service's capabilities. The Examiner cites column 5, lines 14-18 where Adams teaches that a subscriber unit may send a request message to a website of a relying party to request access to another application controlled by the relying party to facilitate a financial transfer. As noted above regarding the rejection of claim 6, the cited passage makes no mention of any advertisements of any kind.

The Examiner argues, "the website describes the service, and the service can be provided upon authentication." However, the Examiner is clearly speculating regarding the workings of Adams' system. Adams does not mention that the website describes any service provided by the relying party. The Examiner's speculation regarding the website is improper and irrelevant in a rejection based on anticipation. Additionally, the Examiner is ignoring the specific limitations (in claim 5, from which claim 9 depends) regarding the client receiving the advertisement for the service and regarding where the client's indication of a set of desired capabilities includes an indication of the advertisement. The cited passage only mentions that a subscribing unit may send a request to a website. Adams does not mention anything about the subscribing unit including an indication of any website in an indication of a set of desired capabilities, as would be required according to the Examiner's rejection of claim 9.

In the Response to Arguments, the Examiner asserts (erroneously) that use of advertisements is inherent in Adams' system. The Examiner fails to provide any argument, evidence or interpretation of Adams that includes a protected advertisement describing a service's capabilities, but not providing an interface to the service's capabilities. As described above regarding claim 5, the Examiner's line of reasoning is that since Adams' system includes a subscriber unit sending a request to access a service, Adams inherently includes the specific limitations of Applicants' claims. However, there

is nothing about Adams' system that necessarily requires a protected advertisement describing a service's capabilities, but not providing an interface to the service's capabilities. The Examiner's interpretation is clearly incorrect.

Thus, the rejection of claim 9 is not supported by the cited art and removal thereof is respectfully requested.

Claims 10, 11 and 12:

Adams fails to disclose a client receiving a protected advertisement for the first service, wherein the protected advertisement indicates an address for sending the capability credential request message to. The Examiner cites column 5, lines 14 - 18 and column 6, lines 31 - 49. Neither of the cited passage makes any mention of a client receiving a protected advertisement that indicates an address to which to sending a capability credential request message. The first cited passage states that a subscriber unit may communicate a request over a global network link to a website of a relying party requesting access to another application controlled by the relying party to facilitate a financial transfer. The second cited passage describes a centralized privilege data selector that "selects among privilege data for a plurality of subscribers."

The Examiner considers the subscriber unit's request for access to an application controlled by the relying party the capability credential request message of claim 10. However, nowhere does Adams describe a protected advertisement that indicates an address to which the subscriber unit sends its request.

Additionally, the Examiner has elsewhere (regarding the rejection of claims 5) admitted that Adams makes "no specific mention of the advertisement". The Examiner has provided no citation, argument or interpretation that Adams' system includes a protected advertisement, as described in claim 10. Since Adams is silent regarding a protected advertisement indicating an address for sending the capability credential request message to, Adams clearly fails to anticipate claim 10.

Claim 13:

Adams fails to disclose a client receiving a protected advertisement for the first service, wherein said protected advertisement indicates an authentication service and wherein said requesting a capability credential comprises the client requesting a capability credential from the authentication service. The Examiner cites column 5, lines 14-18 and column 6, lines 49-67. However, as described previously, neither of these cited passages makes any mention of any advertisement further fail to describe a protected advertisement that indicates an authentication service.

The Examiner asserts, "the website describes the service, and the service can be provided upon authentication." However, the Examiner's statement is not based on the teachings of Adams. Nowhere does Adams teach that "the website described the service". In fact, the only mention in Adams teaches regarding the website states, "the subscriber unit 200 may communicate a request over a global network link to a Website of the relying party requesting access to another application controlled by the relying party to facilitate a financial transfer." Adams does not mention anything about the website describing the service.

Moreover, whether or not Adams' website "describe[s] the service" and whether or not "the service can be provided upon authentication" is completely irrelevant to a client receiving a protected advertisement that indicates an authentication service. Presumably the Examiner is equating Adams' subscriber unit requesting access to "another application controlled by the relying party" with requesting a capability credential from an authentication service. However, a subscriber unit requesting access to an application does not disclose anything about a client receiving a protected advertisement for a service that indicates an authentication service. The Examiner has not cited any portion of Adams that discloses this limitation of claim 13.

Thus, the rejection of claim 13 is not supported by the cited art and removal thereof is respectfully requested.

Claim 14:

Adams fails to disclose the authentication service determining a level of the first service's capabilities that the client is authorized to use. The Examiner cites column 6, lines 49 - 67. However, the cited passage does not describe an authentication service determining a level of a service's capabilities that a client is authorized to use. Instead, the cited passage describes a centralized privilege data selector that uses subscriber identification data to obtain attribute certificates from an attribute certificate repository. The centralized privilege data selector also uses relying party identification to obtain privilege test data. The centralized privilege data selector then determines whether there are any matching attribute certificates that satisfy the privilege test criteria data. Thus, Adams' centralized privilege data selector determines whether the repository includes any attribute certificates that match the test criteria data.

However, the Adams' centralized privilege data selector does not have anything to do with determining a level of the service's capabilities that the client is authorized to use. As Adams states, a privilege data selector selects among a plurality of attribute certificates associated with a selected subscriber unit and that the privilege test criteria data may be generated by the relying party to indicate the specific privilege information necessary for the relying party to grant privilege to a subscriber unit (Adams, column 3, lines 44-51). In other words, the relying party indicates, by generating privilege test criteria data, what sort of privilege data is required to grant a subscriber unit privilege and the privilege data selector selects attribute certificates that match the test criteria data. Adams' centralized privilege data selector does not determine a level of a service's capabilities that a client is authorized to use. Instead, it merely determines which attribute certificates for a subscriber unit match the privilege test criteria data provided by the relying party.

Furthermore, Adams fails to disclose the authentication service sending the capability credential to the client, where the portion of the service's capabilities that the capability credential indicates that the client has a right to use is no more than the set of desired capabilities. The Examiner cites 6, lines 58 – 67. The Examiner equates the attribute certificates returned by Adams' privilege data selector with the capability credential of claim 13. However, Adams does not disclose that the portion of a service's capabilities that a returned attribute certificate indicates that the subscriber unit has a right to use is no more than the set of desired capabilities. Adams teaches only that his privilege data selector returns attribute certificates that match a particular set of privilege criteria test data.

Thus, the rejection of claim 14 is not supported by the cited art and removal thereof is respectfully requested.

Claim 15:

Adams fails to disclose wherein the portion of the first service's capabilities that the capability credential indicates that the client has a right to use is the lesser of the level of the first service's capabilities that the client is authorized to use and the set of desired capabilities. The Examiner again cites column 6, lines 49 – 67, where Adams describes the centralized privilege data selector that returns attribute certificates that match privilege criteria test data. However, the cited passage does not describe that the attribute certificates indicate a portion of a service's capabilities that a client has a right to use as being the lesser of the level of the service's capabilities that the client is authorized to use and the set of desired capabilities. In fact nowhere does Adams teach anything regarding this limitation of claim 15. The Examiner is merely speculating regarding the workings of Adams' system, which is clearly improper.

Since Adams is silent regarding that the portion of the first service's capabilities that the capability credential indicates that the client has a right to use is

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the lesser of the level of the first service's capabilities that the client is authorized to use and the set of desired capabilities, Adams clearly fails to anticipate claim 15.

Second Ground of Rejection

Claims 3 and 7 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Adams. Appellants traverse this rejection for at least the reasons presented regarding their respective independent claims.

Claim 7:

Further regarding claim 7, the Examiner has failed to provide a proper motivation for modifying the system of Adams' to use a URI. In fact, the Examiner fails to provide any motivation at all. Instead, the Examiner merely states that it would have been obvious "because URI is standard identifier for accessing a website or advertisement." However the Examiner also admitted (regarding claim 5) that Adams fails to disclose the use of an advertisement. In the rejection of claim 5, the Examiner argues that an "advertisement serves as a way of letting the user be aware of the service available". Thus, the Examiner is now arguing that it would have been obvious to include a URI to an advertisement that is not taught by Adams.

Moreover, as noted in the M.P.E.P. at 2144.03, "it is never appropriate to rely solely on 'common knowledge" in the art without evidentiary support in the record". See, *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697; *Ahlert*, 424 F.2d at 1092, 165 USPQ 421. That is precisely the case here, the Examiner has merely stated that it would be obvious to modify Adams to use a URI to an advertisement (that is even taught by Adams) because "URI is standard identifier for accessing a website or advertisement".

Third Ground of Rejection:

Claim 4 stands finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Adams in view of Czerwinski et al. "An architecture for a Secure Service Discovery Service" (Hereinafter, Czerwinski). Appellants traverse the rejection of claim 4 for at least the reasons presented regarding its independent claim.

Fourth Ground of Rejection

Claims 17-23, 25-39 and 41-47 stand finally rejected under 35 U.S.C. § 102(a) as being anticipated by Adams. Appellants traverse this rejection for at least the following reasons. Different groups of claims are addressed under their respective subheadings.

Claims 17, 18, 31, 33, 34 and 47:

Regarding claim 17, Adams fails to disclose an interface configured to receive over the connection a capability credential that indicates that the client has the right to use only a portion of a service's capabilities, wherein the portion is less that a total of the capabilities provided by the first service. As described above regarding claim 1, Adams teaches a system for granting security privileges by providing test criteria data so that security privilege certificates (or other authorization credentials) may be selected from among multiple subscriber privilege data. Adams teaches that certificates, such as Kerberos tickets, privilege attribute certificates, or other public key certificates (Adams, column 7, lines 48-55) may be selected from among multiple privilege data based on test criteria supplied by a relying unit (such as a software application, computer node or other entity). A selector entity may search a common repository of security privilege certificates. The selector entity then returns any and all privilege data that meets the test criteria data. Thus, the selector unit may return multiple certificates, each of each meets the test criteria data. See, Adams, column 3, lines 26-59; column 4, lines 25-36; and column 5, lines 18-46. Adams does not mention anything about a selecting and returning a certificate that indicates a subscriber unit (client) has the right to

use *only* an indicated portion of a services capabilities, which would be required for Adams to anticipate claim 1. Instead, Adams states that any matching attribute certificates are sent as privilege data (Adams, column 6, lines 65-67). The certificates in Adams do not indicate that a client has the right to use *only* a portion that is less than all of a service's provided capabilities. No mention is made in Adams of allowing access to only a portion of a service's capabilities.

The Examiner cites column 5, lines 14-32 of Adams and refers to Adams' teachings regarding a subscriber communicating a request for another application controlled by a relying party and regarding a certificate selector analyzing a subscriber's attribute certificates to determine whether any of them contain privilege data that is consistent with privilege test criteria. However, the teachings of Adams relied on by the Examiner do not disclose an interface configured to receive a capability credential that indicates that the client has the right to use only a portion of a service's capabilities, wherein the portion is less that a total of the capabilities provided by the first service. Instead, the Examiner's cited passage describes a particular manner in which Adams' system determines whether the subscriber certificates, such as data representing a subscriber unit's privilege status, meet the particular required privilege test criteria data. Adams teaches that privilege test criteria data indicates "the specific privilege information necessary for the relying party to grant privilege to a subscriber unit" (Adams, column 3, lines 47-51). Thus, the portions of Adams relied on by the Examiner are not referring to a capability credential indicating that a client has the right to use only a portion of a services capabilities. Instead, the cited portions of Adams are teaching a particular method of determining whether a subscriber's privilege status meets the particular privilege requirements of a relying unit. As noted above, the certificates in Adams do not indicate that a client has the right to use only a portion of a service's capabilities. In fact, Adams makes no mention regarding allowing access to only a portion of a service's capabilities.

In the Advisory Action, the Examiner argues, "the privilege data returned by the selector entity indicates that the user has the right to use only certain portion of the

service's capabilities." However, the Examiner's interpretation of Adams is incorrect. As described above, Adams' system determines whether subscriber certificates meet particular test criteria data. In other words, Adams' teaches that a subscriber's certificates are verified to ensure that the particular type of certificate is an approved type. For example, Adams teaches that the privilege test criteria data may indicate the specific privilege information necessary for the relying part to grant privilege to the subscriber unit. The Examiner is merely speculating in hindsight regarding Adams' system. As noted above, nowhere does Adams make any mention whatsoever of an interface configured to receive over the connection a capability credential that indicates that the client has the right to use *only a portion* of a service's capabilities, wherein *the portion is less that a total of the capabilities* provided by the first service.

Moreover, Adams is not concerned with granting a client rights to use only a portion of a service's capabilities. Instead, Adams is concerned with minimizing the number of certificates that must be transferred and also with preventing privilege data from being sent to non-privilege parties (Adams, column 2, lines 58-61 and column 3, lines 41-44). Adams contrasts his systems with previous systems that require the subscriber to present all attribute certificates to the relying party.

Anticipation requires the presence in a single prior art reference disclosure of each and every limitation of the claimed invention, arranged as in the claim. M.P.E.P 2131; Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 USPQ 481, 485 (Fed. Cir. 1984). The identical invention must be shown in as complete detail as is contained in the claims. Richardson v. Suzuki Motor Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). As discussed above, Adams clearly fails to disclose an interface configured to receive of the connection a capability credential that indicates that the client has the right to use only a portion of a service's capabilities, wherein the portion is less that a total of the capabilities provided by the first service. Therefore, Adams cannot be said to anticipate claim 17.

Claims 19 and 35:

In regards to claims 19 and 35, Adams does not disclose that the identification of the first service comprises a Universal Unique Identifier (UUID). The Examiner does not cite any portion Adams that discloses this limitation of claim 19. Instead, the Examiner merely states, that "claims 17-23 ... encompass the same scope as claims 1-7..." and therefore that "claims 17-23 ... are rejected based on the same reasons set forth in rejecting claims 1-7...". However, claim 3, the rejection of which the Examiner is relying on for the rejection of claims 19 and 35, is not rejected under 102(a) as being anticipated by Adams. Instead, claim 3 is rejected under 103(a) over Adams. Thus, the 35 U.S.C. § 102(a) rejection of claims 19 and 35 is improper.

Claims 20 and 36:

In regards to claims 20 and 36, Adams does not disclose that capability credential request message is formatted in eXtensible Markup Language (XML). The Examiner does not cite any portion Adams that discloses this limitation of claims 20 and 36. Instead, the Examiner merely states, that "claims 17-23 ... encompass the same scope as claims 1-7..." and therefore that "claims 17-23 ... are rejected based on the same reasons set forth in rejecting claims 1-7...". However, claim 4, the rejection of which the Examiner is relying on for the rejection of claims 20 and 36, is not rejected under 102(a) as being anticipated by Adams. Instead, claim 4 is rejected under 103(a) as being unpatentable over Adams in view of Czerwinski. Thus, the 35 U.S.C. § 102(a) rejection of claims 20 and 36 is improper.

Claims 21 and 37:

In regards to claim 21, Adams fails to disclose that the interface is configured to receive an advertisement for the first service, wherein the advertisement describes the portion of the first service's capabilities. The Examiner admits that Adams makes "no specific mention of the advertisement" but asserts, "advertisement serves as a way of

letting the user be aware of the service[s] available." The Examiner has clearly failed to provide a proper rejection of claim 5. By admitting that Adams does not disclose the use of an advertisement, the Examiner has clearly admitted that Adams fails to anticipate claim 5. The Examiner's statement regarding how advertisements may serve as a way of letting a user know what services are available has absolutely no bearing on the fact that Adams fails to disclose anything about an advertisement for a service that describes a portion of the service's capabilities. The fact that Adam's system might benefit from the use of such an advertisement, as suggested by the Examiner, is irrelevant to a rejection based on anticipation (i.e. § 102). The Examiner's statement is also unsupported by any evidence of record.

A claim is "anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference" (M.P.E.P. § 2131). As admitted by the Examiner, Adams fails to disclose the use of an advertisement that describes a portion of the service's capabilities. Moreover, the Examiner has not shown that the use of advertisements is inherent in Adams' system. "To serve as an anticipation when the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence" and "[s]uch evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference" (emphasis added, M.P.E.P. § 2131.01 III). As noted above and admitted by the Examiner, Adams makes no mention of advertisements, nor has the Examiner provided any evidence showing that advertisements are necessarily present in Adams' system. Instead, the Examiner has merely concluded that the use of an advertisement might be beneficial, which as stated above, is completely speculative and irrelevant. The Examiner is merely using hindsight speculation, which is clearly improper.

In the Response to Arguments and the Advisory Action, the Examiner asserts that a subscriber request to access an application through Adams' relying party's website "indicates that the advertisement for certain services exist as to enable a subscriber to request privilege to use such service", citing column 5, lines 14 – 18 of Adams. The

Examiner further asserts, "Adams inherently disclose[s] these limitation[s] as they are [an] essential requirement for a subscriber to request certain services provided by a relying party." Thus, the Examiner's argument is that the mere fact that a subscriber unit makes requests the use of a service inherently discloses the specific limitations of claim 5. The Examiner is incorrect. Even if Adams could be said to inherently disclose an advertisement, which Appellants maintain he does not, the Examiner has still failed to show how Adams' system inherently includes a client receiving an advertisement that describes the portion of the service's capabilities.

The Examiner's cited portion of Adams (column 5, lines 14 –18) merely states that a subscriber unit may communicate a request over a global network link to a website of a relying party request access to another application controlled by the relying party to facilitate a financial transfer. The cited passage does not contain any teaching that may be considered to inherently include a client receiving an advertisement for a service that describes a portion of the service's capabilities. In fact, Adams does not describe anything about a client receiving any sort of information that describes a portion of a service's capabilities. Nor has the Examiner provided any explanation or interpretation of Adams that includes the subscriber unit, which the Examiner equates to the client of Applicants' claim, receiving any such information. Instead, the Examiner merely asserts that Adams' teachings inherently disclose the specific limitations of Applicant's claims.

As noted above, the Examiner has not provided any extrinsic evidence that Adams' system necessarily includes a client receiving an advertisement for a service that describes a portion of the service's capabilities. Moreover, M.P.E.P. 2112 IV states, "[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic" (underlining in original). The Examiner's opinion that Adams' system inherently includes the use of advertisements "as a way of letting the user be away of the service available" or "to enable a subscriber to request privilege to use such service" are **not extrinsic evidence** that makes clear that the use of advertisements as recite in Applicants' claim 5 is necessarily present in Adams' system.

In further regard to claim 21, Adams fails to disclose that the indication of the set of desired capabilities comprises an indication of the advertisement. As noted above, Adams fails to mention anything about advertisements, as admitted by the Examiner. Furthermore, Adams does not mention anything about a client indicating a set of desired capabilities as part of requesting a capability credential, where the indication of the set of desired capabilities includes an indication of an advertisement for a service. As noted above, the Examiner has merely stated that the use of advertisements would be beneficial to Adams' system without showing that Adams' system actually includes the use of advertisements. The Examiner has not provided any argument, explanation, or evidence showing that Adams' system includes a client indicating a set of desired capabilities, where that indication includes an indication of an advertisement for a service providing those capabilities.

The Examiner cites column 6, lines 31-67 of Adams and states, "the subscriber wants to access the relying party's service, but has to request [a] credential from the centralized privilege data selector by submitting the subscriber's identity and the relying party's identifier." The cited passage only mentions that a subscriber includes an identification of the relying party, but makes no mention of any indication of an advertisement that describes a portion of the first service's capabilities. Furthermore, the cited passage only teaches that Adams' subscriber unit includes the relying party's identifier when requesting a security certificate. The cited passage makes no mention of the client including an indication of an advertisement for a service as part of an indication of a set of desired capabilities, as required by Applicants' claim 5. Nor does the Examiner mention anything about Adams' subscriber including an indication of an advertisement for the service when indicating a set of desired capabilities.

Thus, for at least the reasons above, the rejection of claim 21 is not supported by the cited art and removal thereof is respectfully requested.

Claims 22 and 38:

Regarding claim 22, contrary to the Examiner's assertion, Adams fails to disclose where the indication of the advertisement is the advertisement itself. The Examiner cites column 5, lines 14-18. However, as described above regarding claim 6, the cited portion of Adams makes no mention of any indication of an advertisement, nor that such an indication of an advertisement is the advertisement itself. Instead, the cited passage states that a subscriber unit may communicate a request over a global network link to a website of a relying party requesting access to another application controlled by the relying party to facilitate a financial transfer. The cited passage provides no support for the Examiner's rejection of claim 6. Furthermore, in the rejection of claim 5, the Examiner admits that Adams makes no mention of advertisements.

In the Response to Arguments and the Advisory Action, the Examiner asserts that the use of advertisements is inherent in Adams' system. The Examiner is incorrect. Please refer to the remarks above regarding claim 21 for a detailed discussion regarding the fact that Adams' system does not inherently disclose the limitations of Applicants' claims. Furthermore, the Examiner have failed to provide nay extrinsic evidence, citation, explanation or interpretation illustrating that a subscriber unit's request necessarily indicates a set of desired capabilities that includes an indication of an advertisement (as recited in claim 5) where the indication of the advertisement is the advertisement itself, as recited in claim 6. Following the Examiner's line of reasoning (that the use of advertisements are inherent in Adams' system) a subscriber's request would also have to inherently include an advertisement. There is nothing about Adams' system that inherently requires a subscriber unit to include an advertisement (of which Adams makes no mention) in an indication of capabilities as part of requesting a capability credential. The Examiner's interpretation is clearly incorrect.

The Examiner has clearly failed to make a proper rejection of claim 22. The rejection of claim 22 is not supported by the cited art and removal thereof is respectfully requested.

Claims 23 and 39:

In regards to claim 23, Adams does not disclose that the indication of said advertisement is a Uniform Resource Identifier (URI) to said advertisement. The Examiner does not cite any portion Adams that discloses this limitation of claim 23. Instead, the Examiner merely states, that "claims 17-23 ... encompass the same scope as claims 1-7..." and therefore that "claims 17-23 ... are rejected based on the same reasons set forth in rejecting claims 1-7...". However, claim 7, the rejection of which the Examiner is relying on for the rejection of claim 23, is not rejected under 102(a) as being anticipated by Adams. Instead, claim 7 is rejected under 103(a) over Adams. Thus, the 35 U.S.C. § 102(a) rejection of claim 23 is improper.

Claims 25 and 41:

Regarding claim 25, Adams does not disclose an advertisement that is a protected advertisement that <u>describes the first service's capabilities but does not provide an interface to the first service's capabilities</u>. The Examiner cites column 5, lines 14-18 where Adams teaches that a subscriber unit may send a request message to a website of a relying party to request access to another application controlled by the relying party to facilitate a financial transfer. As noted above regarding the rejection of claim 6, the cited passage makes no mention of any advertisements of any kind.

The Examiner argues, "the website describes the service, and the service can be provided upon authentication." However, the Examiner is clearly speculating regarding the workings of Adams' system. Adams does not mention that the website describes any service provided by the relying party. The Examiner's speculation regarding the website is improper and irrelevant in a rejection based on anticipation. Additionally, the Examiner is ignoring the specific limitations (in claim 21, from which claim 25 depends) regarding the client receiving the advertisement for the service and regarding where the client's indication of a set of desired capabilities includes an indication of the

advertisement. The cited passage only mentions that a subscribing unit may send a request to a website. Adams does not mention anything about the subscribing unit including an indication of any website in an indication of a set of desired capabilities, as would be required according to the Examiner's rejection of claim 25.

In the Response to Arguments, the Examiner asserts (erroneously) that use of advertisements is inherent in Adams' system. The Examiner fails to provide any argument, evidence or interpretation of Adams that includes a protected advertisement describing a service's capabilities, but not providing an interface to the service's capabilities. As described above regarding claim 21, the Examiner's line of reasoning is that since Adams' system includes a subscriber unit sending a request to access a service, Adams inherently includes the specific limitations of Applicants' claims. However, there is nothing about Adams' system that necessarily requires a protected advertisement describing a service's capabilities, but not providing an interface to the service's capabilities. The Examiner's interpretation is clearly incorrect.

Thus, the rejection of claim 25 is not supported by the cited art and removal thereof is respectfully requested.

Claims 26, 27, 28, 42, 43 and 44:

Adams fails to disclose that the interface is configured to receive a protected advertisement for the first service, wherein the protected advertisement indicates an address for sending the capability credential request message to. The Examiner cites column 5, lines 14-18 and column 6, lines 31-49. Neither of the cited passage makes any mention of a client receiving a protected advertisement that indicates an address to which to sending a capability credential request message. The first cited passage states that a subscriber unit may communicate a request over a global network link to a website of a relying party requesting access to another application controlled by the relying party to facilitate a financial transfer. The second cited passage describes a centralized privilege data selector that "selects among privilege data for a plurality of subscribers."

The Examiner considers the subscriber unit's request for access to an application controlled by the relying party the capability credential request message of claim 10. However, nowhere does Adams describe a protected advertisement that indicates an address to which the subscriber unit sends its request.

Additionally, the Examiner has elsewhere (regarding the rejection of claims 5) admitted that Adams makes "no specific mention of the advertisement". The Examiner has provided no citation, argument or interpretation that Adams' system includes a protected advertisement, as described in claim 26. Since Adams is silent regarding a protected advertisement indicating an address for sending the capability credential request message to, Adams clearly fails to anticipate claim 26.

Claims 29 and 45:

Adams fails to disclose a the interface configured to receive a protected advertisement for the first service, wherein said protected advertisement indicates an authentication service and request a capability credential by requesting a capability credential from the authentication service. The Examiner cites column 5, lines 14 – 18 and column 6, lines 49 –67. However, as described previously, neither of these cited passages makes any mention of any advertisement further fail to describe a protected advertisement that indicates an authentication service.

The Examiner asserts, "the website describes the service, and the service can be provided upon authentication." However, the Examiner's statement is not based on the teachings of Adams. Nowhere does Adams teach that "the website described the service". In fact, the only mention in Adams teaches regarding the website states, "the subscriber unit 200 may communicate a request over a global network link to a Website of the relying party requesting access to another application controlled by the relying party to facilitate a financial transfer." Adams does not mention anything about the website describing the service.

Moreover, whether or not Adams' website "describe[s] the service" and whether or not "the service can be provided upon authentication" is completely irrelevant to receiving a protected advertisement that indicates an authentication service. Presumably the Examiner is equating Adams' subscriber unit requesting access to "another application controlled by the relying party" with requesting a capability credential from an authentication service. However, a subscriber unit requesting access to an application does not disclose anything about receiving a protected advertisement for a service that indicates an authentication service. The Examiner has not cited any portion of Adams that discloses this limitation of claim 29.

Thus, the rejection of claim 29 is not supported by the cited art and removal thereof is respectfully requested.

Claims 30 and 46:

Adams fails to disclose wherein the portion of the first service's capabilities that the capability credential indicates that the client has a right to use is the lesser of the level of the first service's capabilities that the client is authorized to use and the set of desired capabilities. The Examiner again cites column 6, lines 49 – 67, where Adams describes the centralized privilege data selector that returns attribute certificates that match privilege criteria test data. However, the cited passage does not describe that the attribute certificates indicate a portion of a service's capabilities that a client has a right to use as being the lesser of the level of the service's capabilities that the client is authorized to use and the set of desired capabilities. In fact nowhere does Adams teach anything regarding this limitation of claim 15. The Examiner is merely speculating regarding the workings of Adams' system, which is clearly improper.

Since Adams is silent regarding that the portion of the first service's capabilities that the capability credential indicates that the client has a right to use is

the lesser of the level of the first service's capabilities that the client is authorized to use and the set of desired capabilities, Adams clearly fails to anticipate claim 30.

Fifth Ground of Rejection

Claims 17-23, 25-39 and 41-47 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Adams. Appellants traverse this rejection for at least the reasons given above regarding their respective independent claims.

Claims 17-23, 25-39 and 41-47:

Regarding the alternative § 103(a) rejection of claims 17-23, 25-39 and 41-47, the Examiner has failed to provide a proper rejection. The Examiner states, "claims 17-23, 25-39, and 41-47 encompass the same scope as claims 1-7 and 9-16" and that "claims 17-23, 25-39, and 41-47 are rejected based on the same reasons set forth in rejecting claims 1-7 and 9-16." However, claims 1-3, 5-7 and 9-16 are not rejected under § 103(a) as being unpatentable over Adams in view of Czerwinski. Thus, the Examiner has failed to provide a *prima facie* § 103(a) rejection of claims 17-23, 25-39 and 41-47.

It has been very well established that to establish a *prima facie* case of obviousness (e.g. a proper § 103(a) rejection) three basic criteria must be met. First, there must be some suggestion or motivation to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference(s) must teach or suggest all the claim limitations. (See, M.P.E.P. § 2143). The Examiner has not met any of the three basic requirements of a proper § 103(a) rejection of claims 17 and 33. Furthermore, the Examiner "bears the initial burden of factually supporting any *prima facie* conclusion of obviousness." If the Examiner does not produce a *prima facie* case, "the applicant is under no obligation to submit evidence of nonobviousness." (see, M.P.E.P. § 2142).

Applicants also note that deficiencies of Czerwinski in regard to independent claims 17 and 33 are discussed in Applicants' previously filed Appeal Brief from which the Examiner reopened prosecution with the current rejection. For the reasons stated above in regard to Adams and the reasons stated in the previous Appeal Brief in regard to Czerwinski, it is clear that neither Adams nor Czerwinski, alone or in combination, teaches or suggests all the limitations of independent claims 17 and 33.

Thus, for at least the reasons presented above, the rejection of independent claims 17 and 33 is not supported by the cited art and removal thereof is respectfully requested.

CONCLUSION

For the foregoing reasons, it is submitted that the Examiner's rejection of claims 1-47 was erroneous, and reversal thereof is respectfully requested.

The Commissioner is authorized to charge the appeal brief fee of \$500.00 and any other fees that may be due to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5181-70400/RCK. This Appeal Brief is submitted with a return receipt postcard.

Respectfully submitted,

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Date: September 11, 2006

VIII. CLAIMS APPENDIX

The claims on appeal are as follows.

- 1. A method for accessing a service in a distributed computing environment, comprising:
 - a client locating a first service within the distributed computing environment, wherein the first service provides a plurality of capabilities to clients executing in the distributed computing environment;
- the client requesting a capability credential to allow the client access to a portion of the first service's capabilities, wherein said requesting a capability credential comprises the client indicating a set of desired capabilities;
 - the client receiving said capability credential, wherein said capability credential indicates that the client has the right to use only_said portion of the first service's capabilities, wherein said portion of the first service's capabilities is less than a total of the plurality of capabilities provided by the first service; and
 - the client using said capability credential to access one or more of said portion of the first service's capabilities.
- 2. The method as recited in claim 1, wherein said requesting a capability credential comprises the client sending a capability credential request message, wherein said capability credential request message comprises an identification of said first service and an indication of the set of desired capabilities.
- 3. The method as recited in claim 2, wherein said identification of said first service comprises a Universal Unique Identifier (UUID).

- 4. The method as recited in claim 2, wherein said capability credential request message is formatted in eXtensible Markup Language (XML).
 - 5. The method as recited in claim 2, further comprising:
 - the client receiving an advertisement for the first service, wherein said advertisement describes the portion of the first service's capabilities; and
 - wherein said indication of the set of desired capabilities comprises an indication of said advertisement.
- 6. The method as recited in claim 5, wherein said indication of said advertisement is said advertisement itself.
- 7. The method as recited in claim 5, wherein said indication of said advertisement is a Uniform Resource Identifier (URI) to said advertisement.
- 9. The method as recited in claim 5, wherein said advertisement is a protected advertisement that describes the first service's capabilities but does not provide an interface to the first service's capabilities.
 - 10. The method as recited in claim 1, further comprising:
 - the client receiving a protected advertisement for the first service, wherein said protected advertisement indicates an address for sending said capability credential request message to; and
 - wherein said requesting a capability credential comprises the client sending a capability credential request message to said address indicated in said protected advertisement.

- 11. The method as recited in claim 10, wherein said address indicated in said protected advertisement is for an authentication service, wherein said sending a capability credential request message comprises sending said capability credential request message to said authentication service, the method further comprising the authentication service sending a credential request response message to the client in response to said capability credential request message.
- 12. The method as recited in claim 11, wherein said credential request response message includes said capability credential, wherein said receiving said capability credential comprises receiving said capability credential from said authentication service in said credential request response message.
 - 13. The method as recited in claim 1, further comprising:
 - the client receiving a protected advertisement for the first service, wherein said protected advertisement indicates an authentication service; and
 - wherein said requesting a capability credential comprises the client requesting a capability credential from said authentication service.
 - 14. The method as recited in claim 13, the method further comprising:
 - said authentication service determining a level of the first service's capabilities that the client is authorized to use;
 - said authentication service generating said capability credential according to said level and said set of desired capabilities; and
 - said authentication service sending said capability credential to the client, wherein said portion of the first service's capabilities that said capability credential

indicates that the client has a right to use is no more than said set of desired capabilities.

- 15. The method as recited in claim 14, wherein said portion of the first service's capabilities that said capability credential indicates that the client has a right to use is the lesser of said level of the first service's capabilities that the client is authorized to use and said set of desired capabilities.
- 16. The method as recited in claim 1, wherein said using said capability credential to access one or more of said portion of the first services capabilities comprises the client sending a message to the first service to access a first capability, wherein the message includes said capability credential, the method further comprising the first service authenticating said capability credential received in the message to verify that the client has the right to use said first capability.

17. A client device, comprising:

a connection to a distributed computing environment;

- an interface coupled to said connection and configured to locate a first service within the distributed computing environment, wherein the first service provides a plurality of capabilities to clients executing in the distributed computing environment;
- wherein the interface is further configured to request over the connection a capability credential for a set of desired capabilities to allow a client on the client device access to a portion of the first service's capabilities;
- wherein the interface is further configured to receive over the connection said capability credential, wherein said capability credential indicates that the client has the right to use only said portion of the first service's

capabilities, wherein said portion of the first service's capabilities is less that a total of the plurality of capabilities provided by the first service; and

wherein the interface is further configured to use said capability credential to access one or more of said portion of the first service's capabilities.

- 18. The client device as recited in claim 17, wherein the interface is configured to request a capability credential by sending a capability credential request message, wherein said capability credential request message comprises an identification of said first service and an indication of the set of desired capabilities.
- 19. The client device as recited in claim 18, wherein said identification of said first service comprises a Universal Unique Identifier (UUID).
- 20. The client device as recited in claim 18, wherein said capability credential request message is formatted in eXtensible Markup Language (XML).
- 21. The client device as recited in claim 18, wherein the interface is further configured to receive an advertisement for the first service, wherein said advertisement describes the portion of the first service's capabilities, and wherein said indication of the set of desired capabilities comprises an indication of said advertisement.
- 22. The client device as recited in claim 21, wherein said indication of said advertisement is said advertisement itself.
- 23. The client device as recited in claim 22, wherein said indication of said advertisement is a Uniform Resource Identifier (URI) to said advertisement.
- 25. The client device as recited in claim 21, wherein said advertisement is a protected advertisement that describes the first service's capabilities but does not provide an interface to the first service's capabilities.

- 26. The client device as recited in claim 17, wherein the interface is further configured to receive a protected advertisement for the first service, wherein said protected advertisement indicates an address for sending said capability credential request message to, and wherein the interface is configured to request a capability credential by sending a capability credential request message to said address indicated in said protected advertisement.
- 27. The client device as recited in claim 26, wherein said address indicated in said protected advertisement is for an authentication service, wherein said sending a capability credential request message comprises sending said capability credential request message to said authentication service.
- 28. The client device as recited in claim 27, wherein the interface is configured to receive said capability credential from said authentication service in a credential request response message.
- 29. The client device as recited in claim 17, wherein the interface is further configure to:
 - receive a protected advertisement for the first service, wherein said protected advertisement indicates an authentication service; and
 - request a capability credential by requesting a capability credential from said authentication service.
- 30. The client device as recited in claim 29, wherein said portion of the first service's capabilities that said capability credential indicates that the client has a right to use is the lesser of said level of the first service's capabilities that the client is authorized to use and said set of desired capabilities.

- 31. The client device as recited in claim 17, wherein the interface is configured to use said capability credential to access one or more of said portion of the first services capabilities for said client by sending a message to the first service to access a first capability, wherein the message includes said capability credential so that the first service may authenticate said capability credential received in the message to verify that the client has the right to use said first capability.
- 32. The client device as recited in claim 17, wherein said interface comprises one or more processes executable on a processor within the client device.
- 33. A tangible, computer accessible storage medium comprising program instructions, wherein the program instructions are computer-executable on a client device to implement:
 - locating a first service within the distributed computing environment, wherein the first service provides a plurality of capabilities;
 - requesting a capability credential to allow a client on the client device access to a portion of the first service's capabilities, wherein said requesting a capability credential comprises the client indicating a set of desired capabilities;
 - receiving said capability credential, wherein said capability credential indicates that the client has the right to use only said portion of the first service's capabilities, wherein said portion of the first service's capabilities is less than a total of the plurality of capabilities provided by the first service; and
 - using said capability credential to access one or more of said portion of the first service's capabilities.

- 34. The tangible, computer accessible medium as recited in claim 33, wherein said requesting a capability credential comprises the client sending a capability credential request message, wherein said capability credential request message comprises an identification of said first service and an indication of the set of desired capabilities.
- 35. The tangible, computer accessible medium as recited in claim 34, wherein said identification of said first service comprises a Universal Unique Identifier (UUID).
- 36. The tangible, computer accessible medium as recited in claim 34, wherein said capability credential request message is formatted in eXtensible Markup Language (XML).
- 37. The tangible, computer accessible medium as recited in claim 34, wherein the program instructions are computer-executable on the client device to further implement:

receiving an advertisement for the first service, wherein said advertisement describes the portion of the first service's capabilities; and

wherein said indication of the set of desired capabilities comprises an indication of said advertisement.

- 38. The tangible, computer accessible medium as recited in claim 37, wherein said indication of said advertisement is said advertisement itself.
- 39. The tangible, computer accessible medium as recited in claim 37, wherein said indication of said advertisement is a Uniform Resource Identifier (URI) to said advertisement.

- 41. The tangible, computer accessible medium as recited in claim 37, wherein said advertisement is a protected advertisement that describes the first service's capabilities but does not provide an interface to the first service's capabilities.
- 42. The tangible, computer accessible medium as recited in claim 33, wherein the program instructions are computer-executable on the client device to further implement:
 - receiving a protected advertisement for the first service, wherein said protected advertisement indicates an address for sending said capability credential request message to; and
 - wherein said requesting a capability credential comprises the client sending a capability credential request message to said address indicated in said protected advertisement.
- 43. The tangible, computer accessible medium as recited in claim 42, wherein said address indicated in said protected advertisement is for an authentication service, wherein said sending a capability credential request message comprises sending said capability credential request message to said authentication service.
- 44. The tangible, computer accessible medium as recited in claim 43, wherein said receiving said capability credential comprises receiving said capability credential from said authentication service in a credential request response message.
- 45. The tangible, computer accessible medium as recited in claim 33, wherein the program instructions are computer-executable on the client device to further implement:

receiving a protected advertisement for the first service, wherein said protected advertisement indicates an authentication service; and

wherein said requesting a capability credential comprises the client requesting a capability credential from said authentication service.

- 46. The tangible, computer accessible medium as recited in claim 45, wherein said portion of the first service's capabilities that said capability credential indicates that the client has a right to use is the lesser of said level of the first service's capabilities that the client is authorized to use and said set of desired capabilities.
- 47. The tangible, computer accessible medium as recited in claim 33, wherein said using said capability credential to access one or more of said portion of the first services capabilities comprises the client sending a message to the first service to access a first capability, wherein the message includes said capability credential so that the first service may authenticate said capability credential received in the message to verify that the client has the right to use said first capability.

IX. EVIDENCE APPENDIX

No evidence submitted under 37 CFR §§ 1.130, 1.131 or 1.132 or otherwise entered by the Examiner is relied upon in this appeal.

X. RELATED PROCEEDINGS APPENDIX

There are no related proceedings.